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## ABSTRACT OF THE DISCLOSURE

A system and method for configuring an automatic test system to produce a plurality of clocks from a reference clock includes a user interface and software. The user interface receives a plurality of inputs that specify desired frequencies of the plurality of clocks. In response to a command from the user interface, the software calculates values for dividers coupled to the reference clock, for deriving each of the desired frequencies from the reference clock. According to one embodiment, the desired frequencies form ratios that must be met to satisfy coherence. In calculating the divider values, the software minimizes frequency errors while precisely preserving the required ratios.